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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,231

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Hideaki Watanabe

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MCCORMICK, PAULDING & HUBER LLP
CITY PLACE II
185 ASYLUM STREET
HARTFORD, CT 06103

EXAMINER

REESE, ROBERT T

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,231	Applicant(s) WATANABE ET AL.	
	Examiner ROBERT T. REESE	Art Unit 3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-5 and 7 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment filed February 17, 2009, has been entered. Claims 1-3 and 6-8 have been amended. Therefore claims 1-8 are currently pending in the application.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-3 and 6-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-3 and 6-8 recite a "hub having a mounting hole to said crankshaft". It should be edited to read "a hub having a mounting hole for placement on the crankshaft" to more accurately describe the function of the mounting hole. Claim 2 recites a first fitting portion and a third fitting portion, but makes no reference to the second fitting the portion. The mention of a third fitting portion implies the existence of a second, which is outside the scope of the claim recitation. The claim recitation of a "third fitting portion" should be changed to the "second fitting portion" to remove the implication of another fitting portion.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1, 2, 6, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Allport (GB 2,374,654).

As per claim 1, Allport discloses: an isolation damper pulley (1) attached to a crankshaft (page 1, paragraph 2) of an engine, comprising: a damper unit (2) including a hub (5) having a mounting hole (13) to said crankshaft and an annular mass body (16) attached to an outside cylindrical portion (7) provided to said hub via a first elastic member (19); a pulley portion (3) including a cylindrical portion (14), in an outer circumferential portion of which a pulley groove (15) is formed and that is disposed outside said annular mass body (as depicted in Figure 2), and a cover portion (depicted in Figure 2 where element 3 is indicated) extending from one axial-directional end of said cylindrical portion in a central direction; a second elastic member (23) whose one end is fixed to a side of said damper unit (2), whose other end is fixed to a side of said pulley portion (3), and to which a pre-compression is applied axially (This pre-compression would be an inherent result of the position of the damper unit, the second elastic member, and the cover); and a pressing unit (4) pressing axially said pulley portion and applying an axial-directional pre-compression to said second elastic member, wherein a fixing position of said pressing unit is capable of being adjusted axially (It is construed that this adjustment is made by varying the lengths of the studs (31 and 32) within the sleeves (28)).

As per claim 2, Allport discloses: an isolation damper pulley (1) attached to a crankshaft (page 1, paragraph 2) of an engine, comprising: a damper unit (2) including a hub (5) having a mounting hole (13) to said crankshaft, a first fitting portion (6) provided

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to said hub so as to be concentric with the center axis of said mounting hole, and an annular mass body (16) attached to an outside cylindrical portion (7) provided to said hub via a first elastic member (19); a pulley portion (3) including a cylindrical portion (14), in an outer circumferential portion of which a pulley groove (15) is formed and that is disposed outside said annular mass body (as depicted in Figure 2), and a cover portion (depicted in Figure 2 where element 3 is indicated) extending from one axial-directional end of said cylindrical portion in a central direction; a second elastic member (23) whose one end is fixed to a side of said damper unit (2), whose other end is fixed to a side of said pulley portion (3), and to which a pre-compression is applied axially; and a pressing unit (4) having a third fitting portion (8) so as to be concentric with said center axis, pressing axially said pulley portion and applying an axial-directional pre-compression to said second elastic member (This pre-compression would be an inherent result of the position of the fitting member, the second elastic member, and the cover), wherein said third fitting portion is axially press-inserted into said first fitting portion so as to be fitted coaxially (depicted in Figure 2), and said first fitting portion has an adjustment margin capable of adjusting axially a fitting position of said third fitting portion (depicted in Figure 2, and determined by axial location on the first fitting portion that the third fitting portion is fitted).

As per claim 6, Allport discloses: an isolation damper pulley (1) attached to a crankshaft (page 1, paragraph 2) of an engine, comprising: a damper unit (2) including a hub (5) having a mounting hole (13) to said crankshaft, a first fitting portion (6 and 7) provided to said hub so as to be concentric with a center axis of said mounting hole,

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and an annular mass body (16) attached to an outside cylindrical portion provided to said hub via a first elastic member (19); a pulley portion (3) including a cylindrical portion (14), in an outer circumferential portion of which a pulley groove (15) is formed and which is disposed outside said annular mass body (as depicted in figure 2), and a cover portion (depicted in Figure 2 where element 3 is indicated) extending from one axial-directional end of said cylindrical portion in a central direction; a second elastic member (23), whose one axial-directional end is supported by said cover portion (as depicted in figure 2) and to which a pre-compression is applied axially (This pre-compression would be an inherent result of the position of the fitting member, the second elastic member, and the cover); a supporting unit having a second fitting portion (8) concentric with said center axis and supporting the other axial-directional end of said second elastic member; and a pressing unit (4) having a third fitting portion (10) concentric with said center axis and pressing axially said cover portion to apply an axial-directional pre-compression to said second elastic member, wherein said second fitting portion and said third fitting portion are press-inserted into said first fitting portion without being fitted to each other, thereby being fitted to said first fitting portion (depicted in figure 2).

As per claim 8, Allport discloses: a manufacturing method for an isolation damper pulley (1) attaching to a crankshaft (page 1, paragraph 2) of an engine (the method of manufacturing is implied by the construction of the product), the method comprising the steps of: preparing a damper unit (2) including a hub (5) having a mounting hole (13) to said crankshaft, a first fitting portion (6 and 7) provided to said hub so as to be

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concentric with a center axis of said mounting hole, and an annular mass body (16) attached to an outside cylindrical portion provided to said hub via a first elastic member (19); preparing a pulley portion (3) including a cylindrical portion (14), in an outer circumferential portion of which a pulley groove (15) is formed and which is disposed outside said annular mass body (as depicted in figure 2), a cover portion (depicted in Figure 2 where element 3 is indicated) extending from one axial-directional end of said cylindrical portion in a central direction and a supporting one axial-directional end of a second elastic member (23), and a supporting means provided with a second fitting portion (8) concentric with said center axis and supporting the other axial-directional end of said second elastic member (depicted in figure 2); press-inserting axially said second fitting portion into said first fitting portion and fitting coaxially said second fitting portion to said first fitting portion (depicted in figure 2); and press-inserting axially, into said first fitting portion (6 and 7), a pressing means having a pressing portion (4) opposed to said cover portion and a third fitting portion (10) concentric with said center axis, applying axially a predetermined pre-compression to said second elastic member by said supporting means and said pressing means (This pre-compression would be an inherent result of the position of the fitting member, the second elastic member, and the cover), and fitting coaxially said third fitting portion (10) to said first fitting portion (near element 3) at a position where an axial-directional isolation length between an end surface of said damper unit and said pulley groove becomes a predetermined length (depicted in figure 2).

Allowable Subject Matter

5. Claims 3-5 and 7 are allowed.
6. The closest prior art, Allport (GB 2,374,654) discloses a Torsional Vibration Damper. The vibration damper includes what is disclosed in the 35 USC 102(b) rejections for claims 1, 2 and 6 above, but does not include a second fitting portion concentric with said center axis and supporting the other axial end of the second elastic member, this second fitting portion axially press inserted into the third fitting portion as required by claim 3. Riu (WO2004/007992) discloses an Integrated Pulley-Torsional Damper Assembly. The pulley-torsional damper assembly does include damper and pulley units with two elastic elements, an annular mass, and a first fitting portion concentric with the center axis, but does not include the second and third fitting portions concentric with the center axis as claimed.

Response to Arguments

7. Applicant's arguments filed February 17, 2009, have been fully considered but they are not persuasive. As discussed in the rejections above, the pre-compression of the second elastic member would be an inherent result of the position of the fitting member, the second elastic member, and the cover. Since the fitting members and the cover are pressing against the second elastic member, the pre-compression would be a natural result of the construction of the damper pulley. As far the adjustability, the recitation of the claims require , for claim 1, that the fixing position of said pressing unit is capable of being adjusted axially, and, for claim 2 the first fitting portion (6) has an adjustment margin capable of adjusting axially to a fitting portion of said third fitting

portion (8). Both limitations are met by the fact that elements 6 and 8 are in a sliding contact with each other, and the length can be adjusted as required by moving the fitting portions into the desired length.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT T. REESE whose telephone number is (571) 270-5794. The examiner can normally be reached on M_F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RTR

/Robert A. Siconolfi/
Supervisory Patent Examiner, Art
Unit 3657

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